Workshop on Barriers and Solutions to Siting Organic Diversion Facilities
Work Sheet

A - Regulatory/Permitting Barriers

Sub-Barriers	Suggested Actions (Solutions) the CIWMB Could Take
Input from Survey Participants: **Air regulations pose significant hurdles to permitting and continued operation of some organic diversion facilities:** • SJVUAPCD developing new rule on VOC emission levels on organic waste operations (composting, chipping and grinding, landfilling, land application, storage or stockpiling, direct feeding, or dehydration),and could result in new compost facilities being in-vessel only with collection systems to capture emissions and several existing operations such as those using windrows having to close; once new rule adopted, operators will only have one year to retrofit facility; for negative aeration of windrows, will have to revise permit and go before planning committee, which takes a lot of time and money, and could possibly result in shutdown of facility at planning level • New air permits for organic waste composting. • New BACTs for new facilities and BARCTs for existing facilities; BACTs considered a moving target; they change constantly since no set standards • Already require permit for grinder/power screen: BACT requires new diesel or electrical engines; considered by some operators as moving target: have mobile permit and stationary permit for same type of equipment, but stationary has a lot more grief for operator; have to update all stationary engines • Lengthy process (3 months) to upgrade machinery • Already require permits to construct and permit to operate • Onerous nature of compliance: once you've put "higher end" system there is proof of compliance/testing requirements • Purchasing emission offsets very expensive • Uncertainty about how GHG will be addressed in the future • Too difficult to site a biosolids composting facility in the SCAQMD because of 1133 rule which requires full enclosure and 80% emission reduction • SQAQMD is more strict than other air districts and the City of Rialto cannot site a compost facility in their city to handle the city's greenwaste • Air district requirements have closed 2 facilities in San Bernardino; cost of compliance is too great **Other Related Sub-barriers:** Lack of reliable, accurate, quantitative data relating to air emission and benefits of composting in California • Emission studies contain data that is all over the place; there is no standardized testing methods and result appear to vary by district How decisions regarding an air emission and the determination on the effects are not fully understood • APCD looks at maximum total VOCs for a site; little sites could add up to more VOCs than 1 efficient large site; APCD should look at total VOCs per ton, not site • Air districts rules force biosolids composting to be done in-vessel or indoors, making composting economically unfeasible • Air districts looking at source point emissions versus system	**Input from Survey Participants:** **Coordinate with air districts:** • Continue to collaborate with SCAQMD and SJVUAPCD on organic waste operations rules, and work with other air districts on similar rules 1. Provide data through workshops and other means that gives solutions to measuring VOC emissions, more information on emission levels that resulted from the CIWMB study at the Modesto Composting Facility 2. Costs and factors for control system (real costs and technical information) 3. Develop BMPs/controls that include cheaper ways to meet emissions (such as different additives Ag-Bags) and their effects on emissions 4. Participate in workshops on draft rules to provide data/information 5. Work with APCD on developing BACT controls, BMPs, include looking at phased replacement as equipment wears 6. Help educate compost facilities on the need to get a permit with APCD 7. Consider using sliding scale for compliance that is based on acreage or tonnage processed 8. Involve Board members and Agency **Pursue data collection and research studies:** • Work with air district to identify BMPs and technologies to reduce emissions to safely site and operate facilities consistently with environmental and public health laws 1. Consider carbon banking into soils through composting and using carbon credits to off-set emissions 2. Consider benefits of waste being composted (treated) rather than disposed in landfill 3. Consider phased approach to complying with VOCs 4. Consider looking at total VOCs per ton, not site • Fund data collection and research studies to provide new and up-to-date data/information to assist in the decision making process 1. Conduct study on emissions from various feedstocks and/or mixes of feedstocks (such as 80% green waste, 20% food waste; 100% green waste; manure, biosolids, green waste mixes) and process used (such as chip-n-grind, windrow, enclosed, and in-vessel facilities or anaerobic digester) 2. Conduct sampling emissions as opposed to a full-blown scientific study which is too expensive

emissions; they are missing the net benefits of composting Facilities that handle multiple feed stocks face additional challenges in complying with regulatory requirements from various agencies • Biosolids, manure, food waste • Not enough data on emission from various feedstocks and/or mixes of feedstocks Existing regulatory structure does not recognize beneficial end use of organics (e.g., agriculture versus commercial sales) and treats all facilities similarly • APCD has not calculated environmental savings from use of compost • APCD does not consider uncontrolled decomposition at a site versus composting • APCD does not recognize beneficial use of compost versus chemical fertilizer, which is non-fixed • Agriculture activities do not have the same level of regulation: dust from shaking almond not regulated versus composting; farmers don't need to run water at end of grinder, whereas composters do • Compost facilities heavily regulated for VOCs, whereas landfills are not • If composters taking food waste are regulated too heavy for VOCs, they may not continue to accept food waste which will then be directed to landfills increasing GHG emissions at the landfills • Emission levels are regulated below the "natural" level of decay • No differentiation between odors from an organic diversion facility versus toxic emission from an industrial facility	

B - Regulatory/Permitting Barriers

Sub-Barriers	Suggested Actions (Solutions) the CIWMB Could Take
Input from Survey Participants: **Water regulations (waste discharge requirements) pose significant hurdles to permitting and operation of compost facilities:** • CVRWQCB developing new WDRs for greenwaste composting; WDRs have specific requirements in permit, which are primarily to address runoff concerns with generation of salts and heavy metals in leachate • Data lacking on the salts generated from composting • Need to have consultants to come up with options for handling leachate • Proposed WDRs could include impermeable pad and lined pond to collect leachate for re-spraying on compost • WDRs review and approval process is time consuming **Other Related Sub-barriers:** The impact that unnecessary regulations put on the cost of developing a facility • Require impermeable pad, monitoring controls, and leachate control at site adjacent water treatment plants which makes no sense • Operator may not be able to get new WDRs since in flood plain • Require testing for heavy metals ($3,500 per month) when no compost facility has problems with heavy metals other than those using sludge • Make discharges to a water treatment facility so burdensome that it can result in untreated water flowing directly to local creeks and SF Bay Uncertainty of future direction of RWQCBs which could place additional burdens on operators is a problem Facilities that handle multiple feed stocks face additional challenges in complying with regulatory requirements from various agencies • Alternative liquids for moisture Existing regulatory structure does not recognize beneficial end use of organics (e.g., agriculture versus commercial sales) and treats all facilities similarly • RWQCB has not calculated environmental savings from use of compost • RWQCB does not consider uncontrolled decomposition in nature versus composting at a site • RWQCB does not recognize beneficial use of compost (fixed) versus chemical fertilizer, which is non-fixed	**Input from Survey Participants:** **Coordinate with regional water boards:** • Continue to work with the CVRWQCB and other RWQCBs on general WDRs for composting 1. Work with CVRWQCB and other RWQCBs on training operators on how to contain leachate 2. Work with CVRWQCB and other RWQCBs on educating industry why leachate is a problem 3. Work with CVRWQCB and other RWQCBs on developing BMPs, including multi-stream compost activities such as food waste and anaerobic digestion 4. Work with CVRWQCB and other RWQCBs to identify unnecessary regulations **Pursue data collection and research studies:** • Work with regional water boards to identify BMPs and technologies to reduce discharges to safely site and operate facilities consistently with environmental and public health laws • Fund data collection and research studies to provide new and up-to-date data/information to assist in the decision making process • Provide information on water savings and chemical pesticide and fertilizer reductions when using compost

C - Regulatory/Permitting Barriers

Sub-Barriers	Suggested Actions (Solutions) the CIWMB Could Take
Input from Survey Participants: **CIWMB regulations pose hurdle to permitting and operation of organic diversion facilities:** • Full SWFP very slow process • Big gap between EA notification and full permit for compost facilities • Full permit level for taking food waste • Regulating anaerobic digester as compost facilities and requiring a full SWFP • Requiring chip and grind operations to have 1% or less contaminants in the incoming feedstock, when most incoming feedstock is significantly higher at 5%, but still needs to be processed • Any change in operation requires permit change, which takes time and is costly **Other Related Sub-barriers:** The impact that unnecessary regulations put on the cost of developing a facility Facilities that handle multiple feed stocks face additional challenges in complying with regulatory requirements from various agencies • Biosolids, manure, food waste • Stipulations/requirements seem to affect transfer processes for food waste than the process of composting Existing regulatory structure does not recognize beneficial end use of organics (e.g., agriculture versus commercial sales) and treats all facilities similarly • Green waste facilities are subjected to the same regulations as composting or co-composting facilities, which are different in terms of operation, products, as well as holding and processing times Economics/cost of permitting becoming too great, even if requirements can be met	**Input from Survey Participants:** **Review CIWMB regulations:** • Review the tiered permitting regulations, Title 14, for organic diversion, including multi-stream compost activities such as food waste and anaerobic digestion 1. For smaller amounts of materials (percentages) of compost materials allow lesser tier 2. Regulations should be tied to contamination level of waste stream 3. Review restriction on commingled contaminants in incoming greenwaste of 1% or less, which is too restrictive; most greenwaste processing facilities include a screening station where commingled contaminants are removed before processed green material is distributed to end users 4. Need to redefine residuals for conversion technology, providing more flexibility with 10% (which must be recalculated) and 1% redefined 5. Need standards that define other beneficial uses (such as dirty MRF screenings: regulations should define when allowed to be applied to soil or used as ADC 6. CIWMB should reference other requirements such as Federal 503 in their regulations 7. Consider location and prevailing wind for tier placement: odor, dust, and truck traffic may be less of a concern depending on location and wind 8. CIWMB should measure to see if biosolids composting odor problem is in finished product, occurs at height of odor season; regulations do not address intrinsic odor in final product; CIWMB doesn't regulate finished product 9. Work with LEAs overall on what is an acceptable level of complaint 10. LEAs need better enforcement tools: more enforceable State minimum standards for vectors, odors, and limits on operations during wind events 11. Processes that involve organic/natural materials should be considered "agricultural-related" and should have less restriction versus processing of manufactured materials 12. Processes that involve organic/natural materials should be placed under "agricultural" purview • Review CIWMB regulations to see how the requirements fit in with other agency requirements and reducing those that seem less important, but require a lot of resources/time to comply with them (such as the requirement that composters train all employees on all aspects of compost, which requires new training program development and is onerous for smaller operations • Review the existing permitting process and update regulations and policies to take into account new technologies and be flexible enough to accommodate future advancements in alternative technologies • Review the existing permitting process and update regulations to ensure they are grounded in the best available science • Level the playing field between landfills and composting facilities • Consider economics when considering environmental

	concerns • Consider benefits of organic diversion when considering regulations and permits 1. Regulations need to be clear on beneficial reuse • Consider long-term options for more formal coordinated permitting and consideration of broader benefits • Create incentive to have agricultural lands accept more than diary manure, such as green waste, and develop a new permit level to promote partnering • Work with MRF owners to help them expand to do composting and provide them with grants/economic incentives • Consider Right to Permit type regulations or legislation, where if you meet certain criteria it is easier to move through CEQA process **Pursue data collection and research studies:** • Fund data collection and research studies to provide new and up-to-date data/information to assist in the decision making process 1. CIWMB needs to conduct or support health studies to assure the public that odors from and/or operations at biosolids or composting sites do not adversely effect health; this will help locals with their decision making and CIWMB regulations can be based on sound science • Develop best management practices for handling multiple feed stocks • Continue to work on Life Cycle Analysis data for operations (including CT), especially with regards to GHG emissions and benefits • CIWMB needs to take ownership of research projects and be the leader of conversion technology in the State • CIWMB needs to fund and/manage R&D projects to develop conversion technology

D - Regulatory/Permitting Barriers

Sub-Barriers	Suggested Actions (Solutions) the CIWMB Could Take
Input from Survey Participants: **Inconsistencies/contradictory goals across Air District, RWQCB, and CIWMB make it difficult to site new, or expand or operate existing organic diversion facilities:** • Conflict between benefits from diversion and increase, in handling facilities that could create problems with air, water, odor, etc • Reduce methane for GHG versus reducing VOCs at compost facilities • APCD pushing for enclosed facilities which are not economically feasible • RWQCB pushing for leachate control which isn't economically feasible • Air district have authority over odor at landfills, but not compost facilities • Couldn't site biosolids composting facility near POTW **Other Related Sub-barriers:** Current uncertainty of pending air district rules and water regulations which could place additional burdens on operators if enacted No centralized and recognized regulatory authority for organic diversion • Individual agencies are focusing only on their missions and no one is looking at the big picture Regulatory agencies (air districts, CIWMB, RWQCBs) do not share data/information • Lack of data sharing amongst regulatory agencies may impede the permitting process; there is no clear permitting pathway for conversion technologies Operators are hesitant to make changes at diversion facilities since they could face time-consuming and costly local, regional and state requirements • Cutting edge technologies face challenges from regulators • No guarantee once changes are made that facility will be in compliance with regulations The impact that unnecessary regulations put on the cost of developing a facility Difficulty in understanding all aspects of regulatory requirements since they are located in different areas of the California Code of Regulations and inconsistent with one another	**Input from Survey Participants:** **Work on permit streamlining:** • Create an ombudsman to facilitate permits getting through the system 1. To give heads-up of what needs to be done for APCD permit, WDRs, and SWFP 2. Consider seeking legislative authority in the creation of the ombudsman to provide more clout 3. Consider seeking legislation to create one agency (CIWMB) to oversee composting permits similar to CEC role for energy permits 4. Consider seeking legislation to create one agency (Cal/EPA) to oversee composting permits 5. Create higher level working group (chairs/executive officers) amongst air, water, and waste boards that looks at competing goals for each regulatory (similar to Climate Action Team) 6. Consider seeking legislation to create an organization that has control over all boards under Cal/EPA: waste, air and water; all boards would report to this organization, which would include legislative appointees. Give Cal/EPA the authority and responsibility to act as the coordinator to insure uniformity and consistency of all regulations that impact the development and operation of any organic diversion facility, including California Energy Commission, Public Utility Commission and Department of Food and Agriculture • Work with Cal/EPA, air districts and regional water boards on the idea of having one agency coordinate permits 1. Work with air district and regional water board to provide good CEQA coordination on impacts to water and air quality, with a goal of shaving off 6 months to a year for CEQA review; develop guidance document on CEQA process; provide input on CEQA as early as possible 2. Look at CEQA process and simplify it 3. Oversee composting permits by meeting with regulators to make sure they are aware of project and project will meet all requirements (similar to CEC role for energy permits) 4. Develop a clear permitting path in California or conversion technology projects will not come to California 5. Need to make clear the requirements for conversion technology • Establish a state clearinghouse on getting a permit in California 1. Provide way to track all requirements, such as acting as consultant, developing web site and training (similar to APCD manual on digestion) 2. Include source-emission testing for feedstocks, BMPs, etc. **Coordinate with air districts and regional water boards:** • Continue to work with air districts and regional water boards in addressing cross-media issues with existing proposals 1. Identify unnecessary regulations and require that a cost-benefit analysis precede new regulations

2. Work with APCDs on odor and possibility of APCD including odor in rules
3. Include the California Department of Agriculture in the discussion so improvements in soil quality/fertility, decreased need for chemicals, and water conservation are considered

- Look at streamlining and improving ways to regulate facilities, such as through better monitoring to remove need to source test or shortening inspection times, rather than reducing regulatory oversight for facilities that implement BMPs
- Consider siting and development of smaller facilities (conversion technology, transfer stations, etc: more cost effective because SCAQMD provides emission offsets and credits for facilities that basically stay within around 300 tons/day to meet the emission thresholds; for PM10 the cost to comply and stay under the allowed 4 tons/year offset is about $150,000, without the emission off-set allowance the cost to comply would be around $2 million to $3 million; can handle waste within the community
- Work with air districts and regional water boards to update science in regulatory coordination
- Work with air districts and regional water boards in using the same information/data
- Coordinate with other State regulators in the permitting of new or expanded facilities, including CDFA, Department of Fish and Game, State Parks, etc.
- Develop a mechanism to insure uniformity and consistency of regulations by RWQCBs and air districts with those by the SWRCB and ARB, respectively, when appropriate
- Develop a legislative proposal to remove the existing statutory obstacles to allow the development of conversion technology facilities in California as long as they comply with all federal, state, regional, and local rules and regulations
- Need to redefine conversion technology and give diversion credits; need a technically reasonable definition (such as including oxygen in the definition of gasification, since a small amount of oxygen is utilized in the process; consider biomass as a conversion technology instead of transformation
- Work with government at all levels (local, regional, state and federal) to have a uniform message based on fact, not politics

Pursue data collection and research studies:

- Work with air districts and regional water boards to identify BMPs and technologies to reduce emissions/discharges to safely site and operate facilities consistently with environmental and public health laws
  1. Conduct demonstration projects to show BMPs
- Fund data collection and research studies to provide new and up-to-date data/information to assist in the decision making process
  1. Conduct life cycle analysis that considers location of facility to point of generation and transportation distance, benefits of organic use

2. Conduct life cycle analysis that considers actual air quality costs incurred in the transportation emissions and burn plant emissions balanced against the relatively small composting emissions for processes that actually would reduce emissions by being able to open windrow compost
3. Look at/promote more co-siting of organic facilities at landfills to reduce NIMBYism
4. Develop case studies on private versus public ownership, cost analysis, barriers
5. Conduct cost-benefit analysis of BMPs, including problems they could cause
6. Look at all agencies/regulators goals and develop universal cost-benefit approach to composting
7. Conduct study on emissions from various feedstocks and/or mixes of feedstocks (such as 80% green waste, 20% food waste; 100% green waste; manure, biosolids, green waste mixes) and process used (such as chip-n-grind, windrow, enclosed, and in-vessel facilities or anaerobic digester)
8. Seek data on what is the impact on the environment if no organic diversion facility processes discard
9. Conduct a thorough study of conversion technologies, including the analysis on the air quality impact; technology transfer (answering the question "What does it take to apply the technology to communities in California?"), more research on applying the technology in enough detail so jurisdictions can make informed choices; infrastructure analysis to determine if preprocessing is necessary in order to apply the technology in California

- Have Cal/EPA pay for the research efforts to encourage cross-agency cooperation: ARB personnel could design air emissions data collection criteria; CIWMB personnel could design volumetric/feedstock-ratio data collection criteria; Water Board personnel could design run-off collection and testing criteria; all data would be equally available to all Cal/EPA boards without screening by any one agency; it might encourage a "whole-process" examination with data collected simultaneously on the whole facility/process
- Work with air districts and regional water boards in developing a state clearinghouse for scientific study that could be used by decision makers
- Facilitate meetings for information sharing between state and regional regulators

Develop tools to facilitate organic diversion for operators/regulators:

- Develop local model ordinance for siting organic diversion facilities
- Develop models or case studies on successful siting, including real world experiences with local jurisdictions
- Develop training/web tools to navigate all regulations for use by haulers, composters, conversion technology stakeholders, regulators, public, etc
    1. Make clear what is required of the operator and by what agency, so they know ahead what is expected
    2. Develop formal operator training in conjunction with UC Davis, APCD, and RWQCB on compost management; reduce oversight if certified for training; include how to fill out an application, take readings, etc.

	3. Include guidance/recommendations developed by SCAQMD for planning commissions • Develop a program level CEQA document for siting compost facilities in California, similar to Cal/EPA effort for program EIR for anaerobic digesters • Place data on BMPs on web site • Develop agreed-upon step-by-step procedure that is handed out to any interested party before they submit any application for any permit for an organics diversion facility • Develop one comprehensive checklist that includes all requirements for siting a diversion facility • Establish a State Center for Sustainable Agriculture to educate public, other regulators, local governments (similar to Kansas and Arkansas); teach permaculture and sustainable agriculture concepts • Establish a resource center where the newest conversion technologies are housed and available (CIWMB should fund and build), with experts going out to various countries, photograph and document the technologies from emissions, environmental impacts, to equipment and feedstocks, etc.; this information should be made available to local jurisdictions **Provide funding:** • Help subsidize operators meeting air district/RWQCBs requirements (latest scrubbers, newest odor control, or to retrofit equipment) by assessing a disposal fee at landfills or with generators of organic wastes • Provide funding for pilot projects for conversion technology project in order to overcome this barrier

E - Land Use Planning Barriers

Sub-Barriers	Suggested Actions (Solutions) the CIWMB Could Take
Input from Survey Participants: **Community opposition (NIMBY):** • Main issues raised: odor, biosolids, truck traffic, dust, impact to crops from spores, health impacts, visual impact, reduced property values, and litter • Environmental Justice: more facilities located in low-income/industrial areas • Language/information barrier within Hispanic population • Lack of education increases opposition • Can be misled by competitors who discourage siting of a new facility that would be competing for same feedstock **Other Related Sub-barriers:** Poor public perception and lack of trust prevents the public from supporting organic diversion in their communities • Operators making promises they can't keep (such as, "It will never smell") • Detractors mislabel processes and proponents don't explain simply and clearly enough how the labels are wrong • Lack of general public outreach support from environmental and/or regulatory agencies for facility development and conversion technology implementation • Past projects failed There is a lack of communication on net environmental benefits of organic diversion • Lack of information may result in more reluctance to changes	**Input from Survey Participants:** **Take on a more proactive role:** • More direct CIWMB involvement during the local planning process and direct interaction at County Board of Supervisors and City Council meetings, where CIWMB serves as a resource on organic diversion 1. Provide input at CUP public hearing or comment through CEQA process, fully disclosing any concerns with odor, dust, traffic, impact to ground water, etc. and steps proposed to mitigate concerns either by design or use 2. Provide benefits of composting without endorsing specific project at local public hearing (not enough focus on the beneficial aspects and this needs to get out) 3. Recognize the jurisdiction of local government land use decision and do not bypass this authority 4. Stay out of local planning process 5. CIWMB needs the ability to overrule local zoning when detrimental to residential areas (also responsibility of State agencies to assess when negative impacts will occur (beyond or with CEQA) • Play a more proactive role in educating local decision makers, including local planners and the public with up-to-date information regarding health and environmental issues and mitigation as well as benefits from facilities handling organic materials 1. Work with communities interested in siting facilities to pre-identify sites; CIWMB could create an inventory of these sites available to facilities looking to locate and provide overall siting assistance 2. Educate about not siting potential nuisance sources upwind from residential areas; do not put houses close to waste handling; limit truck traffic around residential areas and wind blowing diesel exhaust 3. Educate about importance of siting with regard to compliance 4. Educate about value of backyard composting and grasscycling 5. Educate public on solving the problem locally and the overall environmental benefits of a local organics diversion facility: hauling off organic material creates pollution, GHG, fossil fuel consumption 6. Educate (bilingual) about benefits of green waste diversion and provide tours of facilities that are currently mulching/composting green waste 7. Educate about need to reduce contamination rates of feedstocks 8. Publish study on costs and benefits of Ag-Bags and other technologies 9. Publish a validated report with the Governor's signature which provides shocking, quantifiable numbers on the need for organic diversion facilities 10. Work with green companies doing outreach to educate on value of organic diversion and provide financial support 11. Develop a contact list of resources at the CIWMB for

	people with questions • Be recognized as resource for organic diversion done in an environmentally sound manner • Consider idea of State-run organic diversion facilities, which may have less resistance to siting • Develop public relations campaign to address poor public perception of organic diversion facilities 1. Include composting in message to public when promoting recycling in general 2. Disclose costs of running curb-side recycling program and benefits from composting 3. Educate what materials can and cannot be put into green waste bins in English and Spanish to limit contamination 4. Include discussion of possible impacts 5. Facilitate public understanding of recycling in their community with the local facility that processes the organic material 6. Work with USDA on campaign to educate public about the benefits of applying compost to soil 7. Conduct campaign with sanitation agencies on the benefits of recycling biosolids and green waste; show how organics recycling benefits the community • Develop and share data on BMPs and benefits to educate public • Establish a specific department within the CIWMB to assist composters in political, regulatory, and local land use processes and issues; target support to be timely for the facility attempting to be permitted; provide service similar to economic development agencies • Develop a method to assist jurisdictions in applying appropriate conversion technologies, which includes education and outreach • Do not be an advocate for conversion technologies, Alameda County is opposed to high temperature technologies • Push for restructuring of CEQA, which gives too much weight to handful of complainants (particularly when CUPs are concerned) **Develop tools to facilitate organic diversion:** • Develop local model for local process for siting organic diversion facilities 1. Include location as a key to successful siting • Develop models or case studies on successful siting, including real world experiences with local jurisdictions 1. Promote operators talking to neighbors prior to permit process to meet their concerns and answer their questions • Develop training/web tools to navigate all regulations for use by haulers, composters, conversion technology stakeholders, regulators, public, etc 1. Focus on permit requirements, including all those required by various entities; for local government requirements direct viewer to contact waste agency and planning department • Provide technical guidance in assessing meteorological, geographical, geotechnical, hydrological, and biological conditions, conducting habitat studies, etc. • Develop a program level CEQA document for siting compost facilities in California • Develop guidance document on CEQA process; provide input on CEQA as early as possible • Place data on BMPs on web site

	Pursue data collection and research studies: • Work with air districts and regional water boards to identify BMPs and technologies to reduce emissions/discharges to safely site and operate facilities consistently with environmental and public health laws 1. Conduct demonstration projects to show BMPs • Fund data collection and research studies to provide new and up-to-date data/information to assist in the decision making process 1. Conduct life cycle analysis that considers location of facility to point of generation and transportation distances 2. Look at/promote more co-siting of organic facilities at landfills to reduce NIMBYism 3. Conduct cost-benefit analysis of BMPs 4. Conduct study on emissions from various feedstocks and/or mixes of feedstocks (such as 80% green waste, 20% food waste; 100% green waste; manure, biosolids, green waste mixes) and process used (such as chip-n-grind, windrow, enclosed, and in-vessel facilities or anaerobic digester) • Work with air districts and regional water boards in developing a state clearinghouse for scientific study that could be used by decision makers • Facilitate meetings for information sharing between state and regional regulators • Develop on-line clearinghouse of information for use by LEA's, planners, and operators to use when promoting a project • Prepare executive summaries for different technologies for planners

F - Land Use Planning Barriers	
Sub-Barriers	**Suggested Actions (Solutions) the CIWMB Could Take**
Input from Survey Participants: **Lack of local government planning for increased organics processing capacity** • Unlike Solano County that will be revising its CWIMP to include organic diversion planning, most jurisdictions do not have adequate plans • Planning relates to goals and diversion credits set by State • Agricultural waste missing from consideration	**Input from Survey Participants:** **Seek statutory requirement that local jurisdiction establishes specific processing capacity goal:** • Seek authority to require local solid waste management plans include specific diversion facility identification that enables the jurisdiction to reach its diversion goal • Then, seek authority to evaluate local and regional diversion facility/diversion stream compatibility and report to the Legislature if a regional imbalance exists or if reliance on remote facilities will have a negative environmental impact • Then, seek authority to fine local governments who have not adequately planned for facilities that will meet diversion goals in an environmentally sound fashion • Work with local jurisdictions willing to site compost facilities to develop an inventory of available sites and identify contact at jurisdiction who can provide siting assistance • Require certain number of facilities based on population or land parcels similar to CRV redemption center or used oil collection facility requirements • Consider using funds generated by fines from local government who have not adequately planned for facilities that meet diversion goals to help local governments site organic diversion facilities • Require 15-year plan for organic diversion • Require material/processing has to be considered at State level, planning can't be at local level • Seek legislation that requires facilities to be sited

G - Economic Barriers	
Sub-Barriers	**Suggested Actions (Solutions) the CIWMB Could Take**
Input from Survey Participants: **Capital cost too high:** Costs high in permitting, equipment, infrastructure, labor and fuel, land/property prices too high • Investors are not willing to invest in conversion technology and/or any other technology if they are not told upfront the state requirements that must be met • Lack of consistency among state and regional agencies' regulations negatively impacts the economical viability of composting facilities	**Input from Survey Participants:** **Take on a more proactive role to reduce permitting costs:** • More direct CIWMB involvement during the local planning process and direct interaction at County Board of Supervisors and City Council meetings, where CIWMB serves as a resource on organic diversion • Play a more proactive role in educating the Legislature, local decision makers, and the public with up-to-date information regarding health and environmental issues and mitigation as well as benefits from multi-million dollar capital investment in facilities handling low-value organic materials 1. Provide workshops for redevelopment, chambers, elected officials on how to help compost facilities site in their city; explain benefits of organics diversion to these officials • Publicize that organic diversion done in an environmentally sound manner is a service that comes at a price to stakeholders and has positive and some negative environmental impact • Seek data on carbon sequestration credits depending on processing method and resulting products • Develop public relations campaign to address poor public perception of organic diversion facilities and need for proximity to point of generation • Use data on BMPs and benefits to educate public **Provide funding:** • Consider providing grants/low interest loans, debt financing, fee for service, private partnership, etc. to help organic diversion facilities with siting/development/O&M; CIWMB could pursue assessing a disposal fee at landfills for funds or use ADC tonnage fees at regional level